Unilateral Legislation in Global Supply Chain: Case of Conflict Minerals

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Abstract: This article examines the legal, political, and practical implications of unilateral legislation aimed at regulating global supply chains through the lens of conflict mineral governance. Focusing on the United States' Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the European Union's Regulation (EU) 2017/821, it analyzes how these instruments attempt to disrupt the link between mineral extraction and armed conflict, particularly in the Democratic Republic of the Congo (DRC) and other conflict-affected and high-risk areas (CAHRAs). Despite being domestically enacted, both laws exhibit extraterritorial effects, effectively imposing compliance obligations on foreign actors beyond the territorial jurisdiction of the regulating state. The article critically evaluates the legitimacy of these unilateral measures under international law, especially in light of state sovereignty, jurisdictional limits, and the absence of multilateral consensus. It also assesses the empirical outcomes of these regimes, including unintended socioeconomic consequences for artisanal miners and enforcement inconsistencies within the EU. Ultimately, the study contends that while unilateral legislation plays a catalytic role in shaping corporate accountability, its effectiveness and legitimacy remain contingent on broader international legal harmonization and institutional support for actors in vulnerable regions.

Keywords: Conflict minerals; supply chain due diligence; global governance; extraterritoriality

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1 Introduction

In the current international context, the term conflict minerals refers to four principal minerals—tin, tungsten, tantalum, and gold (collectively referred to as "3TG")—sourced from the eastern region of the Democratic Republic of the Congo (DRC). Since the late 20th century, due to the absence of effective governmental control and the fragility of democratic institutions, the eastern DRC has experienced protracted conflicts involving government forces, militia groups, and rebel factions. These conflicts have progressively evolved into resource-based wars centered on control over mineral wealth. As of 2020, it was estimated that 113 armed groups, ranging from small militias to internationally supported organizations, were active in the Kivu region.

The nexus between mineral exploitation, armed conflict, and human rights abuses in the DRC has elicited significant concern from the international community. Yet, the issue of conflict minerals is embedded within complex global supply chains: except for gold, the other 3TG minerals must undergo industrial processing before being used in downstream products such as solar panels and batteries. This complexity presents serious challenges for multinational corporations in managing their supply chains. Inadequate oversight may result in the inadvertent use of conflict minerals. For example, the DRC has recently initiated criminal proceedings in France and Belgium against Apple Inc., alleging that the tin, tantalum, and tungsten used in its mobile phone production were sourced from conflict zones.

The complexity of the supply chain renders early certification models such as the Kimberley Process inapplicable to new forms of conflict minerals. Downstream companies may attempt to "sanitize" the origin of their materials through international supply chains, thereby evading their ethical and social responsibilities.

Consequently, the focus of the conflict minerals discourse has shifted towards supply chain management. To date, the Organisation for Economic Co-operation and Development (OECD) has issued the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (Third Edition) ("OECD Guidance").

However, these documents lack binding legal force. Unlike the Kimberley Process Certification Scheme (KPCS), the Security Council has not incorporated these guidelines into its sanction regimes related to the DRC. As such, the current multilateral efforts remain largely at the level of political commitment, without creating legally binding obligations under international law.

The stagnation of multilateral processes and the normative vacuum in international law have prompted major stakeholder states to adopt unilateral measures. The most notable unilateral legislative instrument is the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act"). Section 1502 of the Act designates 3TG minerals as conflict minerals and imposes a duty on issuers regulated by the U.S. Securities and Exchange Commission (SEC) to submit a Conflict Minerals Report. In 2017, the European Union adopted Regulation (EU) 2017/821, establishing mandatory due diligence obligations for importers of 3TG minerals into the EU.

These legislative measures have extraterritorial effects: their scope of jurisdiction extends well beyond domestic nationals and may implicate the sovereignty of third-party States. Many States seek to regulate extraterritorial conduct through domestic legislation, a practice known as extraterritorial application of national laws. In the absence of binding international norms, unilateral legislation is sometimes justified as a legitimate enforcement mechanism. Proponents argue that, given the realities of economic globalization, extraterritorial regulation is both necessary and reasonable. They further contend that traditional international law lacks the institutional mechanisms to hold transnational corporations and non-state actors accountable, despite their central role in the regulated activities.

Opponents of unilateralism argue that it contradicts core principles of international law, particularly the principle of State consent. [1]Critics emphasize that such legislation often reflects the will of powerful States imposed upon developing nations, who are rarely the originators of such regulation. [2]Unilateral legislative actions therefore represent a non-egalitarian exercise of power. Moreover, the democratic legitimacy of unilateral legislation is questioned, as such measures typically exclude foreign stakeholders from meaningful participation in the legislative process. [3]

This is not the first time the international community has addressed the link between natural resources and armed conflict, nor the first instance of unilateral legislation in this domain. As early as 1998, an investigative report led by Robert Fowler documented how the National Union for the Total Independence of Angola (UNITA) financed its military campaign through illicit diamond sales. Under mounting pressure from Member States, the Kimberley Process Certification Scheme (KPCS) was established with UN support, aiming to ensure that diamonds traded under the scheme did not finance insurgent groups seeking to overthrow UN-recognized governments.

Following the scheme's launch, the United States enacted the Clean Diamond Trade Act (2003) to give domestic legal effect to the KPCS. Similarly, Canada, a key supporter of the scheme, passed the Export and Import of Rough Diamonds Act, establishing the KPCS as the minimum certification standard for rough diamonds. The success of the KPCS provided renewed confidence in the international community's ability to mitigate the "resource curse" through legal intervention.

However, it is important to distinguish the Clean Diamond Trade Act and Canada's Rough Diamonds Act from the legislation governing new forms of conflict minerals. Due to their inherent characteristics, diamonds are typically processed in consumer countries or in non-conflict third countries, allowing for effective point-of-import certification. In contrast, the processing of 3TG minerals often occurs within or near conflict zones, implicating a wide array of upstream and downstream actors, including foreign entities beyond the jurisdiction of the legislating State. Consequently, even though these laws are framed as regulating domestic entities, their actual objective and impact are extraterritorial.

This is especially true of the Dodd-Frank Act, which ostensibly applies only to issuers listed on the New York Stock Exchange, thereby complying with personality-based jurisdiction under international law. However, due to the Act's supply chain-wide auditing requirements, companies not directly regulated by the SEC may still be compelled to conduct due diligence due to customer demands. It is estimated that over 195,000 companies, including those with minimal ties to the U.S., could be affected.

Crucially, for upstream companies operating in conflict regions, their ability to fulfill obligations under such laws heavily depends on local regulatory infrastructure. Given the persistence of armed conflict, it is questionable whether local authorities can implement the regulatory frameworks required by these laws. In practice, the Dodd-Frank Act has effectively

forced the DRC government to suspend mining operations and reconstruct its regulatory system based on foreign legislative models, which have often proven ineffective due to enforcement incapacity.

This article will mainly focus on the Unilateral Legislation in US and EU, to analyze how these unilateral dispositions may pause extraterritorial effect abroad, and influence actors in global chain. It also entails an analysis of their legitimacy under international law as well as an empirical assessment of their practical effectiveness.

2 Overview of Section 1502 of Dodd Frank Act

Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) aims to prevent the funding of armed conflict in the Democratic Republic of the Congo (DRC) and neighboring states through the exploitation of so-called "conflict minerals" — tin, tungsten, tantalum, and gold (3TG). The section mandates that companies registered with the U.S. Securities and Exchange Commission (SEC) disclose whether these minerals originate in the DRC or adjoining countries and, if so, conduct and report due diligence on their supply chains.

Although nominally applicable to U.S.-listed issuers, Section 1502 imposes de facto obligations on non-U.S. actors through supply chain auditing requirements. This global ripple effect has made compliance an international concern: Scholars have highlighted how these obligations place outsized burdens on developing countries lacking administrative infrastructure or formalized mining operations. Commentators note, Section 1502 has created a compliance regime that burdens actors with minimal access to due diligence tools, especially artisanal miners in the DRC who now face economic marginalization. [4]

The functional extraterritoriality of Section 1502 is legally controversial. Though framed as applying to U.S.-based companies, its requirements affect entities globally. In practice, companies located outside U.S. territory, with no material link to the U.S. economy, are pressured to adopt U.S.-defined compliance standards.

This de facto extraterritorial regulation arguably exceeds the limits of prescriptive jurisdiction under customary international law, which traditionally permits such regulation only under limited bases: territoriality, nationality, the protective principle, or universal jurisdiction for certain crimes.

It has been cricticized that Section 1502 raises serious questions about international legality where it imposes obligations on non-U.S. actors through purely commercial nexus, which is not an accepted ground of jurisdiction in public international law.^[5]

Section 1502 represents an ambitious extraterritorial approach to corporate human rights compliance in conflict zones. However, its jurisdictional basis under international law remains tenuous. While unilateral measures can fill governance gaps in the absence of effective multilateral regimes, their legitimacy—and legality—must be balanced against the sovereignty of other states and the principles of international law.

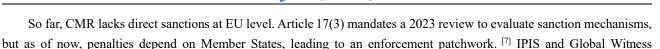
As global supply chains become more complex and politicized, future regulatory models may need to incorporate hybrid approaches, combining national law, private governance, and international cooperation, rather than relying on unilateral extraterritorial statutes alone.

3 Overview of Regulation (EU) 2017/821

Regulation 2017/821, known commonly as the EU Conflict Minerals Regulation (CMR) or the EU Regulation on Responsible Sourcing of Minerals, mandates that importers of tin, tungsten, tantalum, and gold (3TG) into the EU conduct supply chain due diligence following the OECD Guidance on Responsible Mineral Supply Chains. Effective from January 1, 2021, its key aims is to align importer conduct with OECD due diligence standards.

Unlike the US Dodd-Frank Section 1502, which focused narrowly on the DRC, the EU regulation spans all Conflict-Affected and High-Risk Areas (CAHRAs) globally. ^[6]Commentators argue that rebranding the CMR as "Responsible Sourcing Regulation" better reflects its wider aims—protecting human rights and the environment—not merely curbing conflict funding.

The CMR places legal obligations on importers, not downstream manufacturers, although downstream players are encouraged to self-report. Also, it contains a five-step due diligence process mirrors the OECD model: management system, risk assessment, risk mitigation, independent third-party audit, and public reporting.



Regulation 2017/821 is a pivotal step toward responsible mineral sourcing, marking an EU commitment to human rights and conflict prevention. However, implementation remains inconsistent, and without stronger enforcement and broader scope, its transformative potential may remain unrealized.

document persistent illicit trade funding despite the regulation's rollout, suggesting limited ground-level impact.

4 Conclusion

The governance of global supply chains, particularly in the context of natural resource exploitation in conflict-affected regions, presents one of the most pressing normative challenges in international law and global commerce. This article has examined how unilateral legislative responses—most notably Section 1502 of the Dodd–Frank Wall Street Reform and Consumer Protection Act (2010) and the European Union's Regulation (EU) 2017/821—have sought to impose due diligence obligations on corporate actors involved in the sourcing of conflict minerals, namely tin, tungsten, tantalum, and gold (3TG). These legislative initiatives, though emerging in different geopolitical contexts, share a common normative ambition: to disrupt the link between mineral extraction and the financing of armed conflict and to impose human rights accountability throughout global supply chains.

At a conceptual level, both the Dodd-Frank Act and the EU Conflict Minerals Regulation reflect the increasing shift toward the extraterritorial projection of regulatory authority. While they are grounded in national legal systems, their actual operational scope extends far beyond domestic borders, impacting foreign economic actors through global value chains. This phenomenon, often referred to as functional extraterritoriality, raises profound questions about the legitimacy and limits of national law in transnational economic regulation. Traditional jurisdictional principles under customary international law—namely, territoriality, nationality, the protective principle, and universal jurisdiction—offer only a limited basis for such far-reaching measures. As demonstrated in this article, Section 1502, in particular, imposes de facto obligations on non-U.S. entities purely through commercial interdependence, a basis not clearly supported under existing international legal doctrine.

Moreover, these unilateral instruments face criticism for their lack of democratic legitimacy and procedural fairness, particularly when they affect foreign stakeholders who have neither contributed to the legislative process nor have effective recourse to challenge its implications. As several scholars have noted, the application of domestic law to foreign commercial actors risks creating a form of regulatory imperialism, where powerful states impose their normative preferences on weaker jurisdictions under the guise of ethical commerce. In this light, unilateralism, while effective in norm-setting, can also reinforce global power asymmetries and undermine the sovereign equality of states, a foundational principle of the international legal order enshrined in Article 2(1) of the United Nations Charter.

From a policy effectiveness perspective, the impact of these regulations remains mixed. While both Section 1502 and Regulation 2017/821 have undoubtedly increased corporate awareness and generated broader discussions about ethical sourcing, their on-the-ground efficacy remains contested. In the case of the Dodd-Frank Act, empirical studies and NGO reports have indicated that the regulation may have produced unintended adverse consequences in the DRC, such as the marginalization of artisanal miners, the disruption of legitimate supply chains, and the proliferation of informal and illicit trading networks. These outcomes highlight the risks associated with implementing regulatory frameworks without sufficient sensitivity to local contexts, institutional capacities, and socioeconomic dependencies.

Similarly, the EU regulation, while broader in geographical scope, faces significant challenges in implementation and enforcement. The Regulation delegates sanctions and oversight mechanisms to individual Member States, creating a fragmented enforcement regime with varying degrees of stringency and administrative capacity. The absence of an EU-level public registry of compliant importers further complicates accountability efforts, making it difficult for civil society actors to monitor corporate behavior effectively. As documented by IPIS and Global Witness, many importers continue to rely on opaque sourcing practices, and illicit trade routes remain active despite the regulatory architecture in place.

Nonetheless, it is essential to acknowledge the normative innovations introduced by these unilateral instruments. Both

frameworks align closely with the OECD Due Diligence Guidance for Responsible Mineral Supply Chains, which has emerged as a quasi-global standard for corporate responsibility in high-risk areas. By operationalizing the OECD's five-step model—comprising management systems, risk assessment, risk mitigation, third-party audits, and public reporting—these regulations have contributed to the codification of best practices and the institutionalization of supply chain due diligence as a global norm.

Moreover, the extraterritorial effects of these laws have prompted meaningful changes in corporate governance and supply chain management. Large multinationals, particularly in the electronics and automotive sectors, have developed internal compliance mechanisms, auditing tools, and traceability platforms in response to legal and reputational pressures emanating from Section 1502 and the EU CMR. In this respect, unilateral legislation has served as a catalyst for private regulation, creating incentives for voluntary industry initiatives such as the Responsible Minerals Initiative (RMI) and the International Tin Supply Chain Initiative (ITSCI), which support traceability and risk assessment across supply chains.

However, as this article argues, unilateral measures—though normatively ambitious and institutionally influential—are not a substitute for coherent and enforceable multilateral frameworks. The Kimberley Process Certification Scheme (KPCS), despite its limitations, offers an instructive model for multilateral cooperation in the natural resource sector. Its relative success lies in the fact that it was developed through inclusive negotiations, endorsed by the United Nations, and implemented via national legislation in multiple jurisdictions, thereby avoiding the perception of normative imposition. The lack of a comparable multilateral initiative for 3TG minerals leaves a regulatory void that unilateral measures can only partially and imperfectly fill.

In conclusion, the use of unilateral legislation to regulate conflict minerals illustrates both the potential and the limitations of domestic law as a tool of global governance. On the one hand, such laws can generate important normative momentum, encourage industry-wide reform, and signal strong political commitment to corporate accountability and human rights. On the other hand, they also risk undermining international legal principles, exacerbating geopolitical inequalities, and producing unintended socioeconomic consequences for vulnerable communities.

Going forward, the challenge for policymakers, civil society, and international institutions is to reconcile the need for ethical supply chains with the principles of legal legitimacy, effectiveness, and global equity. This will likely require the development of hybrid governance models that combine: Binding international agreements negotiated on a multilateral basis; National implementation through domestic legal systems; Industry self-regulation grounded in transparent standards, And targeted support for local producers and regulators in conflict-affected areas.

Only through such comprehensive and inclusive approaches can the international community move beyond the constraints of unilateralism and establish a truly just and sustainable framework for responsible global trade in natural resources.

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